

IN THE CLAIMS:

1. (Original) A safety system for a media library comprising a plurality of media storage cells and at least one media picker robot that moves along the media storage cells, wherein the library is contained within an enclosure having at least one access means, the safety system comprising:

an access sensor that detects if the access means in the enclosure is open; and

A₂ a control component that operates the robot in the media library in one of the following modes:

if the access means is closed, a normal mode, wherein the picker robot moves at a first specified speed; and

if the access means is open, a safe mode, wherein the picker robot moves at a second specified speed that is slower than the first speed of the normal mode.

2. (Original) The system according to claim 1, wherein:

the access sensor also detects if the access means is locked; and

the control component operates the robot in safe mode only if the access means is unlocked.

3. (Original) The system according to claim 1, wherein the slower robot speed of the safe mode is implemented by means of control software that reduces power to robot.

4. (Original) The system according to claim 1, wherein the slower robot speed of the safe mode is implemented by means of an electrical circuit that limits power to the robot.

5. (Original) The system according to claim 1, wherein the media library further comprises a plurality of picker robots that are responsive to the control component.

6. (Original) The system according to claim 1, wherein the media library further comprises a plurality of access means associated with the access sensor.

7. (Original) A safety system for a media library comprising a plurality of media storage cells and at least one media picker robot that moves along the media storage cells, wherein the library is contained within an enclosure having at least one access means, the safety system comprising:

an access sensor that detects if the access means in the enclosure is open; and

A a control component that operates the robot in the media library in one of the following modes:

if the access means is closed, a normal mode, wherein the picker robot may access the entire media library;

if the access means is open, a safe mode, wherein the picker robot is excluded from moving in at least one restricted zone within the library.

8. (Original) The system according to claim 7, wherein:

the access sensor also detects if the access means is locked; and

the control component operates the robot in safe mode only if the access means is unlocked.

9. (Original) The system according to claim 7, wherein the picker robot is excluded from moving in the restricted zone by means of control software.

10. (Original) The system according to claim 9, wherein the control software diverts the robot outside the zone.

11. (Original) The system according to claim 9, wherein the control software shuts off power to the robot within the zone.

12. (Original) The system according to claim 7, wherein the picker robot is excluded from moving in the restricted zone by means of an electrical circuit that shuts off power to the robot within the zone.

13. (Original) The system according to claim 7, wherein the picker robot is excluded from moving in the restricted zone by means of at least one mechanical stopping mechanism at the periphery of the zone.

14. (Original) The system according to claim 7, wherein the picker robot is excluded from moving in the defined zone by means of at least one obstruction sensor that detects a physical obstruction in the path of the robot in the zone.

Ag 15. (Original) The system according to claim 14, wherein the obstruction sensor operates by at least one of the following means:

optical;

infrared;

ultrasonic;

electromagnetic; and

contact transducer.

16. (Original) The system according to claim 7, wherein the media library further comprises a plurality of media picker robots that are responsive to the control component.

17. (Original) The system according to claim 7, wherein the media library further comprises a plurality of access means associated with access sensor.

18. (Original) A method for providing a safety procedure for a media library comprising a plurality media storage cells and at least one media picker robot that moves along the media storage cells, wherein the library is contained within an enclosure having at least one access means, the method comprising:

determining if the access means in the enclosure is open;

if the access means is closed, operating the picker robot in a normal mode, wherein the robot moves at a first specified speed; and

if the access means is open, operating the picker robot in a safe mode, wherein the robot moves at a second specified speed that is slower than the first speed of the normal mode.

19. (Original) The method according to claim 18, further comprising
determining if the access means is locked; and
operating the robot in safe mode only if the access means is unlocked.

A₂ 20. (Original) A method for providing a safety procedure for a media library comprising a plurality of media storage cells and at least one media picker robot that moves along the media storage cells, wherein the library is contained within an enclosure having at least one access means, the method comprising:

determining if the access means in the enclosure is open; and
if the access means is closed, operating the picker robot in a normal mode, wherein the robot may access the entire media library;
if the access means is open, operating the picker robot in a safe mode, wherein the robot is excluded from moving in at least one restricted zone in the library.

21. (Original) The method according to claim 20, further comprising
determining if the access means is locked; and
operating the robot in safe mode only if the access means is unlocked.
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